```
Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSPTASXS1656

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'MEDLINE, EMBASE, BIOSIS, CAPLUS'
AT 18:26:08 ON 03 JUL 2008
FILE 'MEDLINE' ENTERED AT 18:26:08 ON 03 JUL 2008
FILE 'EMBASE' ENTERED AT 18:26:08 ON 03 JUL 2008
Copyright (c) 2008 Elsevier B.V. All rights reserved.
FILE 'BIOSIS' ENTERED AT 18:26:08 ON 03 JUL 2008
Copyright (c) 2008 The Thomson Corporation
FILE 'CAPLUS' ENTERED AT 18:26:08 ON 03 JUL 2008
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                  89.88      90.09

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                     ENTRY    SESSION
CA SUBSCRIBER PRICE                                  -3.20      -3.20

=> S (human or sapien) (3A) ((klk 8) or (kallikrein 8) or neuropsin or ovasin)
L5         109 (HUMAN OR SAPIEN) (3A) ((KLK 8) OR (KALLIKREIN 8) OR NEUROPSIN
               OR OVASIN)

=> S L5  (6A) (protease or peptidase or proteinase or enzyme (2A) activity)
L6          24 L5 (6A) (PROTEASE OR PEPTIDASE OR PROTEINASE OR ENZYME (2A)
               ACTIVITY)

=> duplicate
ENTER REMOVE, IDENTIFY, ONLY, OR (?):remove
ENTER L# LIST OR (END):l6
DUPLICATE PREFERENCE IS 'MEDLINE, EMBASE, BIOSIS, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L6
L7            9 DUPLICATE REMOVE L6 (15 DUPLICATES REMOVED)

=> d l7 1-9 bib ab

L7   ANSWER 1 OF 9     MEDLINE on STN                   DUPLICATE 1
AN   2007732560     MEDLINE
DN   PubMed ID: 17761692
TI   SerpinB6 is an inhibitor of kallikrein-8 in keratinocytes.
AU   Scott Fiona L; Sun Jiuru; Whisstock James C; Kato Keiko; Bird Phillip I
CS   Department of Biochemistry and Molecular Biology, School of Biomedical
     Sciences, Monash University, Victoria 3800, Australia.. fscott@burnham.org
SO   Journal of biochemistry, (2007 Oct) Vol. 142, No. 4, pp. 435-42.
     Electronic Publication: 2007-08-30.
     Journal code: 0376600. ISSN: 0021-924X.
CY   Japan
DT   (COMPARATIVE STUDY)
     Journal; Article; (JOURNAL ARTICLE)
     (RESEARCH SUPPORT, NON-U.S. GOV'T)
```

LA English
FS Priority Journals
EM 200801
ED Entered STN: 12 Dec 2007
Last Updated on STN: 23 Jan 2008
Entered Medline: 22 Jan 2008
AB SerpinB6 (Proteinase inhibitor 6/PI-6) is an intracellular serpin produced by leukocytes, platelets, endothelial cells, keratinocytes and other epithelial cells. It is a potent cathepsin G inhibitor thought to protect monocytes, neutrophils and bystander cells from ectopic cathepsin G during inflammation. Here we show that serpinB6 also inhibits the human serine protease kallikrein-8 (hK8) and that in human and mouse skin, serpinB6 and kallikrein-8 co-localize in differentiated keratinocytes. SerpinB6 inhibits hK8 with an association rate constant (kass) of 1.8 +/- 0.2 x 10(5) M(-1)s(-1) compared to 3.4 +/- 0.2 x 10(6) M(-1) s(-1) for the interaction between the mouse orthologue of serpinB6 (SPI3/serpinb6a) and mouse kallikrein-8 (mK8). Molecular modelling suggested that the lower efficiency of the serpinB6/hK8 interaction is partly due to the bulkier P2 methionine residue of serpinB6 compared to the smaller P2 valine in SPI3. Taken together, these results suggest that serpinB6 is a physiologically relevant inhibitor of hK8 in skin. We postulate that serpinB6 protects the intracellular compartment of keratinocytes from ectopic hK8.

L7 ANSWER 2 OF 9 MEDLINE on STN DUPLICATE 2
AN 2006739930 MEDLINE
DN PubMed ID: 17178872
TI Human kallikrein 8 protease confers a favorable clinical outcome in non-small cell lung cancer by suppressing tumor cell invasiveness.
AU Sher Yuh-Pyng; Chou Cheng-Chung; Chou Ruey-Hwang; Wu Han-Ming; Wayne Chang Wun-Shaing; Chen Chun-Houh; Yang Pan-Chyr; Wu Cheng-Wen; Yu Chia-Li; Peck Konan
CS Institute of Biomedical Sciences and Statistical Science, Academia Sinica, Taipei, Taiwan.
SO Cancer research, (2006 Dec 15) Vol. 66, No. 24, pp. 11763-70.
Journal code: 2984705R. ISSN: 0008-5472.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LA English
FS Priority Journals
EM 200701
ED Entered STN: 21 Dec 2006
Last Updated on STN: 26 Jan 2007
Entered Medline: 25 Jan 2007
AB The human kallikrein 8 (KLK8) gene, a member of the human tissue kallikrein gene family, encodes a serine protease. The KLK8 protein (hK8) is known to be a favorable prognostic marker in ovarian cancer, but the biological basis of this is not understood. We found that overexpressing the KLK8 gene in highly invasive lung cancer cell lines suppresses their invasiveness. This role in invasiveness was further confirmed by the fact that inhibition of endogenous KLK8 expression with a specific short hairpin RNA reduced cancer cell invasiveness. In situ degradation and cell adhesion assays showed that proteins produced from KLK8 splice variants modify the extracellular microenvironment by cleaving fibronectin. DNA microarray experiments and staining of cells for actin filaments revealed that the degradation of fibronectin by hK8 suppresses integrin signaling and retards cancer cell motility by inhibiting actin polymerization. In addition, studies in a mouse model coupled with the detection of circulating tumor cells by quantitative PCR for the human Alu

sequence showed that KLK8 suppresses tumor growth and invasion in vivo. Finally, studies of clinical specimens from patients with non-small cell lung cancer showed that the time to postoperative recurrence was longer for early-stage patients (stages I and II) with high KLK8 expression (mean, 49.9 months) than for patients with low KLK8 expression (mean, 22.9 months). Collectively, these findings show that KLK8 expression confers a favorable clinical outcome in non-small cell lung cancer by suppressing tumor cell invasiveness.

L7 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:684195 CAPLUS
DN 146:22410
TI Inhibition profiles of human tissue kallikreins by serine protease inhibitors
AU Luo, Liu-Ying; Jiang, Weiping
CS R and D Systems, Inc., Minneapolis, MN, 55413, USA
SO Biological Chemistry (2006), 387(6), 813-816
CODEN: BICHF3; ISSN: 1431-6730
PB Walter de Gruyter GmbH & Co. KG
DT Journal
LA English
AB Accumulated evidence has shown that human tissue kallikreins (hKs), a group of 15 homologous secreted serine proteases, are novel cancer biomarkers. We report here the inhibition profiles of selected hKs, including hK5, hK7, hK8, hK11, hK12, hK13, and hK14, by several common serine protease inhibitors (serpins) found in plasma. The association consts. for the binding of serpins to kallikreins were determined and compared. Protein C inhibitor was found to be the fastest-binding serpin for most of these hKs. α2-Antiplasmin, α1-antichymotrypsin, and α1-antitrypsin also showed rapid inhibition of certain hKs. Kallistatin exhibited fast inhibition only with hK7. Our data demonstrate that these hKs are specifically regulated by certain serpins and their distinct inhibition profiles will be valuable aids in various aspects of kallikrein research.
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:684183 CAPLUS
DN 146:2865
TI Activation and enzymatic characterization of recombinant human kallikrein 8
AU Kishi, Tadaaki; Cloutier, Sylvain M.; Kundig, Christoph; Deperthes, David; Diamandis, Eleftherios P.
CS Department of Pathology and Laboratory Medicine, Mount Sinai Hospital, Toronto, ON, M5G 1X5, Can.
SO Biological Chemistry (2006), 387(6), 723-731
CODEN: BICHF3; ISSN: 1431-6730
PB Walter de Gruyter GmbH & Co. KG
DT Journal
LA English
AB Human kallikrein 8 (hK8), whose gene was originally cloned as the human ortholog of a mouse brain protease, is known to be associated with diseases such as ovarian cancer and Alzheimer's disease. Recombinant human pro-kallikrein 8 was activated with lysyl endopeptidase-conjugated beads. Amino-terminal sequencing of the activated enzyme demonstrated the cleavage of a 9-aa propeptide from the pro-enzyme. The substrate specificity of activated hK8 was characterized using synthetic fluorescent substrates. HK8 showed trypsin-like specificity, as predicted from sequence anal. and enzymic characterization of the mouse ortholog. All synthetic substrates tested containing either arginine or lysine at P1

position were cleaved by hK8. The highest kcat/Km value of 20+103 M-1 s-1 was observed with Boc-Val-Pro-Arg-7-amido-4-methylcoumarin. The activity of hK8 was inhibited by antipain, chymostatin, and leupeptin. The concentration for 50% inhibition by the best inhibitor, antipain, was 0.46 μM. The effect of different metal ions on the enzyme activity was analyzed. Whereas Na+ had no effect on hK8 activity, Ni2+ and Zn2+ decreased the activity and Ca2+, Mg2+, and K+ had a stimulatory effect. Ca2+ was the best activator, with an optimal concentration of approx. 10 μM.

RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 9 MEDLINE on STN DUPLICATE 3
AN 2003256328 MEDLINE
DN PubMed ID: 12782581
TI Human kallikrein 8, a novel biomarker for ovarian carcinoma.
AU Kishi Tadaaki; Grass Linda; Soosaipillai Antoninus; Scorilas Andreas; Harbeck Nadia; Schmalfeldt Barbara; Dorn Julia; Mysliwiec Michal; Schmitt Manfred; Diamandis Eleftherios P
CS Department of Pathology and Laboratory Medicine, Mount Sinai Hospital, Toronto, Ontario, M5G 1X5, Canada.
SO Cancer research, (2003 Jun 1) Vol. 63, No. 11, pp. 2771-4.
Journal code: 2984705R. ISSN: 0008-5472.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LA English
FS Priority Journals
EM 200307
ED Entered STN: 4 Jun 2003
Last Updated on STN: 1 Aug 2003
Entered Medline: 31 Jul 2003
AB Human kallikrein 8 (hK8; neuropsin
) is a serine protease and new member of the hK family. The aim of this study was to examine if hK8 may serve as a novel cancer biomarker. An hk8-ELISA, developed in-house, was used to study the distribution of hK8 in various biological fluids and tissue extracts from healthy individuals and ovarian cancer patients of different stages of the disease (International Federation of Obstetrics and Gynecology II-IV). For ovarian cancer patients, very high levels in ascites fluid were observed (<or=1000 microg/liter; n = 85 samples). Elevated serum levels were seen in 24 of 40 (62%) of ovarian cancer patients. Higher ascites fluid hK8 concentration was associated with better ovarian cancer progression-free survival (P = 0.02). In both serum and ascites fluid, there is a significant correlation between hK8 and CA125 concentration (r = 0.51 and 0.58, respectively). The serum concentration of hK8 was an indicator of progression on regression on longitudinal monitoring of an ovarian cancer patient. These data suggest that hK8 protein is detectable in ovarian cancer tissue extracts, serum, and ascites fluid, indicating that it may serve as a new ovarian cancer marker.

L7 ANSWER 6 OF 9 MEDLINE on STN DUPLICATE 4
AN 2003037510 MEDLINE
DN PubMed ID: 12507964
TI Human kallikrein 8: immunoassay development and identification in tissue extracts and biological fluids.
AU Kishi Tadaaki; Grass Linda; Soosaipillai Antoninus; Shimizu-Okabe Chigusa; Diamandis Eleftherios P
CS Department of Pathology and Laboratory Medicine, Mount Sinai Hospital, Toronto, Ontario, M5G 1X5 Canada.
SO Clinical chemistry, (2003 Jan) Vol. 49, No. 1, pp. 87-96.
Journal code: 9421549. ISSN: 0009-9147.

CY United States
DT Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LA English
FS Priority Journals
EM 200302
ED Entered STN: 28 Jan 2003
Last Updated on STN: 6 Feb 2003
Entered Medline: 5 Feb 2003
AB BACKGROUND: The serine protease human kallikrein 8 (hK8; neuropsin), a new member of the human kallikrein family, was predicted to be secreted; thus, it is expected to be present in biological fluids. The aim of this study was to develop a sensitive and specific immunoassay for hK8 (hK8-ELISA) and establish the distribution of hK8 in tissue extracts and biological fluids. METHODS: Recombinant hK8 was produced in a baculovirus expression system and purified with a three-step chromatographic procedure. Purified hK8 was injected into mice and rabbits for antibody generation. A highly specific and sensitive sandwich-type immunoassay (ELISA) was developed using the rabbit and mouse antisera to hK8. The hK8-ELISA was then used to study the distribution of hK8 in various biological fluids and tissue extracts. RESULTS: The dynamic range of the hK8-ELISA was 0.2 (detection limit) to 20 micro g/L, and imprecision (CV) was <10% within this range. This hK8-ELISA was specific for hK8 and had no detectable cross-reactivity with other members of the human kallikrein family. With this assay, hK8 was detected in tissue extracts of esophagus (highest concentrations), skin, testis, tonsil, kidney, breast, and salivary gland and in the biological fluids breast milk (highest concentrations), amniotic fluid, seminal plasma, and serum. Furthermore, in some cancer cell lines, the concentration of hK8 was regulated by steroid hormones. CONCLUSIONS: We report for the first time production of recombinant hK8 protein, generation of antibodies, and development of a highly sensitive and specific immunoassay for quantification of hK8 in tissue extracts and biological fluids. This assay can be used to explore the potential of hK8 as a marker of cancer or other conditions.

L7 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:736423 CAPLUS
DN 137:274009
TI Cell-specific gene expression profiles and algorithms for their construction and their uses for determining the phenotype of cells and distinguishing cell lines
IN Wan, Jackson; Wang, Yixin
PA Ortho-Clinical Diagnostics, Inc., USA
SO PCT Int. Appl., 850 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002074979	A2	20020926	WO 2002-US8456	20020320
	WO 2002074979	A3	20030313		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,

BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	AU 2002306768	A1	20021003	AU 2002-306768	20020320
	US 20030148295	A1	20030807	US 2002-101510	20020320
	EP 1370696	A2	20031217	EP 2002-753663	20020320
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004519247	T	20040702	JP 2002-574368	20020320
PRAI	US 2001-276947P	P	20010320		
	WO 2002-US8456	W	20020320		

AB The present invention relates to gene expression profiles, algorithms to generate gene expression profiles, microarrays comprising nucleic acid sequences representing gene expression profiles, methods of using gene expression profiles and microarrays, and business methods directed to the use of gene expression profiles, microarrays, and algorithms. By integrating laser capture microdissection, RNA amplification, and cDNA microarray technol., diverse cell types obtained in situ may be successfully screened and subsequently identified by differential gene expression. To demonstrate this integration of technologies, the differential gene expressions of large and small-sized neurons in the dorsal root ganglia of rats were examined, and 477 cDNAs identified with 1.5-fold or greater differences. The gene expression data is transformed into a log-ratio value, and the genes with weak differential values are filtered from the data; the gene expression profiles are then extracted using the MaxCor or Mean Log Ratio algorithms of the present invention. For an unknown sample, it may be necessary to transform the gene expression data of the sample prior to scoring against the expression profiles. Gene expression profiles were thus collected from a set of human primary cells via DNA microarray technol. Cluster anal. of 803 nucleic acid sequences confirmed that the samples could be classified into 3 groups: endothelial, epithelial, and muscle cell.

L7 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2001:123822 CAPLUS
DN 134:176271
TI Human brain-related serine protease neuropsin, expressed by alternative splicing
IN Tsuruoka, Nobuo; Yamashiro, Kyoko; Mitsui, Shinichi; Yamaguchi, Nozomi
PA Suntory, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001046065	A	20010220	JP 1999-220522	19990803
PRAI	JP 1999-220522		19990803		

AB Serine protease neuropsin, expressed as splice variants in human brain, cDNA clones, antisense DNA, recombinant expression, antibodies, and use in drug screening, are disclosed. We have cloned cDNAs encoding two isoforms of a human novel serine protease. They encoded sequences of 260 and 305 amino acids, and both showed significant homol. to mouse neuropsin. Mouse neuropsin has been reported to be involved in hippocampal plasticity, therefore we designated the proteins as type 1 and type 2 neuropsin, resp. The amino acid sequences of the two types of human neuropsin were identical, except that type 2 carried an insert of 45 amino acids at the C-terminus of the leader sequence. The essential three amino acids in the active site triad, His, Asp, and Ser, and the single putative N-glycosylation site were conserved in human and mouse neuropsin. Sequence anal. of the 946 bp genomic DNA spanning the region encoding the insertion sequence revealed that two isoforms were generated in human

brain by alternative splicing. However, the mouse genomic sequence did not conserve the 3' acceptor consensus sequence at the corresponding position, suggesting that type 2 neuropsin was a species-specific splice variant. When the open reading frames of human neuropsin were expressed in Sf9 insect cells, both types of neuropsin were detected in the conditioned media by western blot anal. using anti-human neuropsin serum. Northern blot hybridization and reverse transcription-polymerase chain reaction showed predominant expression of type 1 neuropsin in pancreas. Type 2 neuropsin was preferentially expressed in human adult brain and hippocampus, although both types were expressed in fetal brain and placenta in comparable amts. Dot blot hybridization showed that neuropsin was expressed in various regions of adult brain, including the hippocampus and cerebral cortex, and also in various fetal tissues. These results suggest that human type 2 neuropsin may be important to the adult brain plasticity, although both types may be necessary for the development of the nervous system.

L7 ANSWER 9 OF 9 MEDLINE on STN DUPLICATE 5
AN 1999203457 MEDLINE
DN PubMed ID: 10102990
TI A novel form of human neuropsin, a brain-related serine protease, is generated by alternative splicing and is expressed preferentially in human adult brain.
AU Mitsui S; Tsuruoka N; Yamashiro K; Nakazato H; Yamaguchi N
CS Department of Cell Biology, Institute for Neurological Diseases and Geriatrics, Kawaramachi Hirokaji, Japan.
SO European journal of biochemistry / FEBS, (1999 Mar) Vol. 260, No. 3, pp. 627-34.
Journal code: 0107600. ISSN: 0014-2956.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-AB008390; GENBANK-AB008927
EM 199905
ED Entered STN: 17 May 1999
Last Updated on STN: 3 Mar 2000
Entered Medline: 6 May 1999
AB We have cloned cDNAs encoding two isoforms of a human novel serine protease. They encoded sequences of 260 and 305 amino acids, and both showed significant homology to mouse neuropsin. Mouse neuropsin has been reported to be involved in hippocampal plasticity, therefore we designated the proteins as type 1 and type 2 neuropsin, respectively. The amino acid sequences of the two types of human neuropsin were identical, except that type 2 carried an insert of 45 amino acids at the C-terminus of the leader sequence. The essential three amino acids in the active site triad, His, Asp, and Ser, and the single putative N-glycosylation site were conserved in human and mouse neuropsin. Sequence analysis of the 946 bp genomic DNA spanning the region encoding the insertion sequence revealed that two isoforms were generated in human brain by alternative splicing. However, the mouse genomic sequence did not conserve the 3' acceptor consensus sequence at the corresponding position, suggesting that type 2 neuropsin was a species-specific splice variant. When the open reading frames of human neuropsin were expressed in insect cells, both types of neuropsin were detected in the conditioned media by western blot analysis using anti-human neuropsin serum. Northern blot hybridization and reverse transcription-polymerase chain reaction showed predominant expression of type 1 neuropsin in pancreas. Type 2 neuropsin was preferentially expressed in human adult brain and hippocampus, although both types were expressed in fetal brain and placenta in comparable amounts. Dot blot hybridization showed that neuropsin was expressed in various regions of

adult brain, including the hippocampus and cerebral cortex, and also in various fetal tissues. These results suggest that human type 2 neuropsin may be important to the adult brain plasticity, although both types may be necessary for the development of the nervous system.